FACT SHEET FOR STATE WASTE DISCHARGE PERMIT ST-8085

Weyerhaeuser Company (Moses Lake Corrugated Plant)

SUMMARY

Weyerhaeuser Company Moses Lake Corrugated Plant is located on Wheeler Road in Moses Lake, Washington. The plant makes corrugated boxes and prints 'logos" on the boxes. This is accomplished by taking rolling/flat stock of "paper" and pressing them together on a corrugator. The corrugator than cuts and makes the size of box specified. Then the boxes are moved over to the flexo machine. The flexo machine prints logos on the boxes. From this overall process, wastewater comes from the corrugator (gluing of the boxes), the boiler blowdown, domestic sewage, and ink rinse water. Weyerhaeuser's wastewater discharges to the Dunes Wastewater Treatment Facility operated by the City of Moses Lake.

The main wastewater treatment system in the facility is 4000 gallon tank for ink wash down water. This tank has been modified to provide more settling time for the wash water from ink rinse water from the flexo machines. This tank modification appears to help reduce the BOD5 and TSS loading to the City's treatment plant. This modification was done in accordance with the approved Engineering Report provided by Weyerhaeuser. This tank is pumped out twice a day as slug discharge and sometimes 3 times a day during peak production. However, there are still possible issues with copper, barium, zinc, TDS, color, and possible co-polymer, Sulfate (as SO4), Sulfide (as S), and Sulfite (as SO3) pollutants in this tank's wastewater. So, during this permit cycle, Weyerhaeuser will conduct a source and feasibility study to determine if further treatment is needed. See proposed permit condition S11 for further information.

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INTRODUCTION

This fact sheet is a companion document to the draft State Waste Discharge Permit No. **ST-8085**. The Department of Ecology (the Department) is proposing to issue this permit, which will allow discharge of wastewater to Sand Dunes Wastewater Treatment Facility (Moses Lake, WA). This fact sheet explains the nature of the proposed discharge, the Department's decisions on limiting the pollutants in the wastewater, and the regulatory and technical bases for those decisions.

Washington State law (RCW 90.48.080 and 90.48.160) requires that a permit be issued before discharge of wastewater to waters of the state is allowed. This statute includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into public waters of the state. Regulations adopted by the state include procedures for issuing permits and establish requirements which are to be included in the permit (Chapter 173-216 WAC).

This fact sheet and draft permit are available for review by interested persons as described in Appendix A—Public Involvement Information.

The fact sheet and draft permit have been reviewed by the Permittee. Errors and omissions identified in these reviews have been corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of the Department's response. The fact sheet will not be revised. Changes to the permit will be addressed in Appendix D—Response to Comments.

GENERAL INFORMATION	
Applicant	Weyerhaeuser Company
Facility Name and Address	Moses Lake Corrugated Plant, 13594 Wheeler Rd. NE, P.O. Box 1369, Moses Lake, Washington 98837
Type of Facility:	SIC 2653 Manufacture Corrugated Containers
Facility Discharge Location	Latitude: 49° 07' 89" N Longitude: 119° 12' 07" W.
Treatment Plant Receiving Discharge	Sand Dunes Wastewater Treatment Facility W1/2 Section 12, T18W, R28E, 1801 "k" Road SE, Moses Lake, Washington
Contact at Facility	Jessi Schorzman, Safety/Environmental Coordinator, 509-764-5546
Responsible Official	Name: Dick Ealing Title: Plant Manager Address: 13594 Wheeler Rd, NE, P.O. Box 1369, Moses Lake, Washington 98837 Telephone #:509-764-5500 (Direct) or (509) 765-0261(office) FAX #509-766-9033

BACKGROUND INFORMATION

DESCRIPTION OF THE FACILITY

The Weyerhaeuser Corrugated Plant is located in Moses Lake, Washington. See Map #1 for general idea where the facility is located. The facility consist of the following areas: storing roll/flat stock, producing corrugated boxes, printing "logos" on the boxes, and shipping and receiving. See equipment layout (Diagram #1) for exact location of each area. The facility's approximate total water use per day is 40,000 gallons. Out of this total water use only approximately 23,000 gallons a day is discharge to Dunes Wastewater Treatment Facility. This discharge consist of approximately 11,000 gallons on ink/water waste water and 12,000 gallons of a combination of domestic sewage, boiler blow down, and wash-up water from the Corrugator and the cornstarch solution for the glue. Diagram #2-water mass balance diagram shows the wastewater breakdown of the facility. However, this discharge has a potential to cause interference and/or pass thru at the Dunes Treatment Facility. Therefore, the facility is a Significant Industrial User, but, because the inks are water based, the facility is not subject to Categorical Pretreatment Standards.

HISTORY

The facility was constructed and went into operation around March 1979. The facility had 4 flexo machines and corrugator. In 1984, shipping/receiving area was added. In 1995, a 5th Flexo machine and addition space was added south of the Finishing/Flexo machine area. In 1996, the bulk starch storage and associated piping was added under SEPA.

This facility was operated by Willamette Industries from 1979 to 2001, and is now operated by Weyerhaeuser. Weyerhaeuser purchased Willamette Industries in 2001.

INDUSTRIAL PROCESSES

The facility makes and prints corrugated boxes (box plant). The operations receive paper stock as a raw material. Cardboard sheets are made by gluing two sheets of paper to an inner corrugated sheet. A hot cornstarch solution is used for glue. The cardboard sheets are then fed as needed into cutting/printing machines. Wastewater is generated at the box machine when glue is cleaned from the machine. However, the facility does recycle a major of their starch.

In the printing process, wastewater is generated when ink is changed in the machines. When a print job is complete, the residual ink is drained from the machine (as much as possible). Water is then used to rinse the remaining ink from the printing presses. The rinse water flows to a 4,000 gallon below ground tank. Wastewater is pumped from the tank to the City sewer about twice to three times per day. City staff reported that inks are typically visible in the treatment plant influent especially grayish-black wastewater. Additionally, wastewaters include boiler blowdown and ion exchange (cation) backwash. The ion exchange backwashes about once per week.

Attached is Diagram #3, Process Flow Diagram. Additionally, Chat #1 shows the facility's maximum daily wastewater discharge flow and Chat #2 shows the facility's monthly average wastewater discharge flow.

TREATMENT PROCESSES

The main wastewater treatment system in the facility is 4000 gallon tank for ink wash down water. This tank has been modified to provide more settling time for the wash water from ink rinse water from the flexo machines. This tank modification appears to help reduce the BOD5 and TSS loading to the City's treatment plant. This modification was done in accordance with the approved Engineering Report provided by Weyerhaeuser. This tank is pumped out twice a day as slug discharge and sometimes 3 times a day during peak production. However, there are still issues with copper, barium, zinc, TDS, color, and a possible co-polymer in this tank's wastewater. So, during this permit cycle, Weyerhaeuser will conduct a source and feasibility study to determine if further treatment is needed. See proposed permit condition S11 for further information.

PERMIT STATUS

The previous permit for this facility was issued on April 23, 2003 and amended on June 17, 2003. The permit was amended to move the sampling location from the sewer manhole on the West side of office to the manhole between Wheeler Road entrances.

An application for permit renewal was submitted to the Department on January 3, 2006 and accepted by the Department on January 9, 2006.

SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT

The facility last received a compliance inspection without sampling on February 15, 2006.

During the history of the previous permit, the Permittee has remained in compliance based on Discharge Monitoring Reports (DMRs) and other reports submitted to the Department and inspections conducted by the Department.

WASTEWATER CHARACTERIZATION

The concentration of pollutants in the discharge was reported in the permit application and in discharge monitoring reports. The proposed wastewater discharge is characterized for the following parameters:

Parameter	Concentrations Measured (manhole—Wheeler Road Entrances)			Priority pollutant analysis Scan (manhole—Wheeler Road Entrances) (March 2006)	Priority pollutant analysis Scan (Sump/holding tank) (March 2006)
	Minimum	Maximum	Average		
BOD (5 day) mg/l	7	180	62	--	--
COD, mg/l	38	3300	472	--	--
Total Suspended Solids, mg/l	10	700	141	--	--
Total Dissolved	324	1700	634	--	--

Solids, mg/l					
pH, s.u.	8.2	9.7	9.5	--	--
Total Oil & Grease, mg/l	1.4	17.4	7.1	--	--
Barium(total), ug/l	12	973	136	--	--
Copper(total), ug/l	13.6	14,300	2,540	1,180	9,880
Zinc(total), ug/l	20	830	189	49	148
Styrene, ug/l	--	--	--	21	83
Arsenic(total), ug/l	--	--	--	1.0	1.1
Chromium(total), ug/l	--	--	--	1.5	12.1
Nickel(total), ug/l	--	--	--	1.2	5.5
Lead(total), ug/l	--	--	--	2.6	10.6
Cyanide, mg/l		--	--	0.12	0.77

SEPA COMPLIANCE:

The initial facility was completed in 1978. No SEPA requirements were required at the time for the original facility. However, in 1996, the facility did submit and gained an approved SEPA for bulk starch storage addition.

PROPOSED PERMIT LIMITATIONS

State regulations require that limitations set forth in a waste discharge permit must be based on the technology available to treat the pollutants (technology-based) or be based on the effects of the pollutants to the POTW (local limits). Wastewater must be treated using all known, available, and reasonable treatment (AKART) and not interfere with the operation of the POTW.

The minimum requirements to demonstrate compliance with the AKART requirements and specific design criteria for this facility will be determined in the engineering report during this permitting cycle.

The more stringent of the local limits-based or technology-based limits are applied to each of the parameters of concern.

EFFLUENT LIMITATIONS BASED ON LOCAL LIMITS

In order to protect Sand Dunes Wastewater Facility from pass-through, interference, concentrations of toxic chemicals that would impair beneficial or designated uses of sludge, or potentially hazardous exposure levels, limitations for certain parameters are necessary. These limitations for this discharge are based on local limits established by Sand Dunes Wastewater

Facility and include the following: Fats, oil, and grease (FOG) < 100 mg/l; Biological Oxygen Demand (BOD)< 300 mg/l; and Total Suspended Solids(TSS)<350 mg/l. There is a possible future Total Dissolved Solids (TDS), Copper, Zinc, and Barium limitations based off review a Weyerhaeuser's source and feasibility study, City of Moses Lake's wastewater discharge study on Wheeler Road, and possible future Weyerhaeuser's engineering report. Chart # 3 and Chart #4 shows the concentration of BOD5 and TSS in their wastewater over a period of time. Also, Chart #5, Chart #6, and Chart #7 shows the variable and high concentration of TDS and total metals for Copper, Barium and Zinc.

Pollutant concentrations limitations (at this time) in the proposed discharge with technology-based controls in place will not cause problems at the receiving POTW such as interference, pass-through or hazardous exposure to POTW workers nor will it result in unacceptable pollutant levels in the POTW's sludge.

There were no pollutant concentrations limitations with the existing permit issued. The existing permit was used to establish the pollutant of concerns in more detail.

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are specified to verify that the treatment process is functioning correctly, and that effluent limitations are being achieved (WAC 173-216-110). The monitoring location will be at the manhole between Wheeler Road entrances. Other monitoring may have to take place in other location of the building for the source study, a possible future engineer report, and alternatives to improve the quality of the discharge.

The monitoring schedule is detailed in the proposed permit under Condition S2 and S10. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

Monitoring for flow, color, Sulfate (as S04), Sulfide (as S), Sulfite (as SO3), TDS, TSS, pH, Barium, Copper, Zinc, Oil and Grease, and Total Metals are being required to further characterize the effluent. These pollutant(s) could have a significant impact on the receiving POTW.

OTHER PERMIT CONDITIONS

REPORTING AND RECORDKEEPING

The conditions of S3 are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 173-216-110 and 40 CFR 403.12 (e),(g), and (h)).

OPERATIONS AND MAINTENANCE

The proposed permit contains condition S.5. as authorized under Chapter 173-240-150 WAC and Chapter 173-216-110 WAC. It is included to ensure proper operation and regular maintenance of equipment, and to ensure that adequate safeguards are taken so that constructed facilities are used to their optimum potential in terms of pollutant capture and treatment. The proposed permit requires submission of O&M manual with annual updates for the entire wastewater system.

PROHIBITED DISCHARGES

Certain pollutants are prohibited from being discharged to the POTW. These include substances which cause pass-through or interference, pollutants which may cause damage to the POTW or harm to the POTW workers (Chapter 173-216 WAC) and the discharge of designated dangerous wastes not authorized by this permit (Chapter 173-303 WAC).

DILUTION PROHIBITED

The Permittee is prohibited from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limitations.

SOLID WASTE PLAN

The Department has determined that the Permittee has a potential to cause pollution of the waters of the state from solid waste.

This proposed permit requires, under authority of RCW 90.48.080, that the Permittee develop and submit to the Department a solid waste plan to prevent solid waste from causing pollution of waters of the state. The plan must also be submitted to the local solid waste permitting agency for approval.

NON-ROUTINE AND UNANTICIPATED DISCHARGES

Occasionally, this facility may generate wastewater which is not characterized in their permit application because it is not a routine discharge and was not anticipated at the time of application. These typically are waters used to pressure test storage tanks or fire water systems or leaks from drinking water systems. These are typically clean waste waters but may be contaminated with pollutants. The permit contains an authorization for non-routine and unanticipated discharges. The permit requires a characterization of these waste waters for pollutants and examination of the opportunities for reuse. Depending on the nature and extent of pollutants in this wastewater and opportunities for reuse, Ecology may authorize a direct discharge via the process wastewater outfall or through a stormwater outfall for clean water, require the wastewater to be placed through the facilities wastewater treatment process or require the water to be reused.

SPILL PLAN

The Department has determined that the Permittee stores a quantity of chemicals that have the potential to cause water pollution if accidently released. The Department has the authority to require the Permittee to develop best management plans to prevent this accidental release under section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA) and RCW 90.48.080.

The proposed permit requires the Permittee to develop and implement a plan for preventing the accidental release of pollutants to state waters and for minimizing damages if such a spill occurs.

The Permittee has developed a plan for preventing the accidental release of pollutants to state waters and for minimizing damages if such a spill occurs. The proposed permit requires the Permittee to update this plan and submit it to the Department.

SLUG DISCHARGE CONTROL PLAN

The Department has determined that the Permittee has the potential for a batch discharge or a spill that could adversely effect the POTW therefore a slug discharge control plan is required (40 CFR 403.8 (f)).

COMPLIANCE SCHEDULE FOR MEETING PRETREATMENT STANDARDS

Currently the facility has a semi-pretreatment system. This pretreatment system is a 4,000 gallons holding tank that collects the wastewater washes from all five Flexo machines. The holding tank was modified in 2005 to help settle out the large particles of inks. It appears that the system has reduced the TSS loading to the Dunes Wastewater Treatment Facility. However, the color, TDS, copper, barium, zinc, and possible co-polymer, Sulfate (as SO4), Sulfide (as S), and Sulfite (as SO3) pollutants in this tank's wastewater and the tank's sludge may be causing interference and/or pass-through at the Treatment Facility. Thus, a schedule has been developed in condition S11 of the Permit to evaluate these issues and improve the quality of Weyerhaeuser's wastewater discharge. The schedule includes a source and feasibility study, a possible future engineering report, and if needed, design and construction of wastewater treatment facility to meet pretreatment standards.

GENERAL CONDITIONS

General Conditions are based directly on state laws and regulations and have been standardized for all industrial waste discharge to POTW permits issued by the Department.

Condition G1 requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2 requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3 specifies conditions for modifying, suspending or terminating the permit. Condition G4 requires the Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5 requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6 prohibits the Permittee from using the permit as a basis for violating any laws, statutes or regulations. Conditions G7 and G8 relate to permit renewal and transfer. Condition G9 requires the Permittee to control production or wastewater discharge in order to maintain compliance with the permit. Condition G10 prohibits the reintroduction of removed pollutants into the effluent stream for discharge. Condition G11 requires the payment of permit fees. Condition G12 describes the penalties for violating permit conditions.

PUBLIC NOTIFICATION OF NONCOMPLIANCE

A list of all industrial users which were in significant noncompliance with Pretreatment Standards or Requirements during any of the previous four quarters may be annually published by the Department in a local newspaper. Accordingly, the Permittee is apprised that noncompliance with this permit may result in publication of the noncompliance.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics. The Department proposes that the permit be issued for five (5) years.

REFERENCES FOR TEXT AND APPENDICES

Washington State Department of Ecology.

Laws and Regulations(http://www.ecy.wa.gov/laws-rules/index.html)

Permit and Wastewater Related Information
(http://www.ecy.wa.gov/programs/wq/wastewater/index.html

APPENDICES

APPENDIX A—PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to reissue a permit to the applicant listed on page 1 of this fact sheet. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

Public notice of application was published on January 27 and February 20, 2006 in the Columbia Basin Herald to inform the public that an application had been submitted and to invite comment on the reissuance of this permit.

Further information may be obtained from the Department by telephone, (509) 329-3400, or by writing to the address listed below:

Water Quality Permit Coordinator
Department of Ecology
N. 4601 Monroe
Spokane, WA 99205

This permit was written by Scott Mallery.

APPENDIX B—GLOSSARY

Ammonia—Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Average Monthly Discharge Limitation—The average of the measured values obtained over a calendar month's time.

Best Management Practices (BMPs)--Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD_5--Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD_5 is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

Bypass—The intentional diversion of waste streams from any portion of the collection or treatment facility.

Categorical Pretreatment Standards—National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories.

Compliance Inspection - Without Sampling--A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance Inspection - With Sampling--A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

Composite Sample—A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite"(collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots.

Construction Activity—Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity.

Continuous Monitoring –Uninterrupted, unless otherwise noted in the permit.

Engineering Report—A document, signed by a professional licensed engineer, which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Grab Sample—A single sample or measurement taken at a specific time or over as short period of time as is feasible.

Industrial User—A discharger of wastewater to the sanitary sewer which is not sanitary wastewater or is not equivalent to sanitary wastewater in character.

Industrial Wastewater—Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Interference— A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal and;

Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), sludge regulations appearing in 40 CFR Part 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Local Limits—Specific prohibitions or limits on pollutants or pollutant parameters developed by a POTW.

Maximum Daily Discharge Limitation—The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Method Detection Level (MDL)--The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

Pass-through— A discharge which exits the POTW into waters of the-State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase

in the magnitude or duration of a violation), or which is a cause of a violation of State water quality standards.

pH—The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Potential Significant Industrial User--A potential significant industrial user is defined as an Industrial User which does not meet the criteria for a Significant Industrial User, but which discharges wastewater meeting one or more of the following criteria:

a. Exceeds 0.5 % of treatment plant design capacity criteria and discharges <25,000 gallons per day or;

b. Is a member of a group of similar industrial users which, taken together, have the potential to cause pass through or interference at the POTW (e.g. facilities which develop photographic film or paper, and car washes).

The Department may determine that a discharger initially classified as a potential significant industrial user should be managed as a significant industrial user.

Quantitation Level (QL)-- A calculated value five times the MDL (method detection level).

Significant Industrial User (SIU)--

1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N and;

2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority* on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority* may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

*The term "Control Authority" refers to the Washington State Department of Ecology in the case of non-delegated POTWs or to the POTW in the case of delegated POTWs.

Slug Discharge—Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge to the POTW. This may include any pollutant released at a flow rate which may cause interference with the POTW.

State Waters—Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Stormwater—That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

Technology-based Effluent Limit—A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Coliform Bacteria—A microbiological test which detects and enumerates the total coliform group of bacteria in water samples.

Total Dissolved Solids—That portion of total solids in water or wastewater that passes through a specific filter.

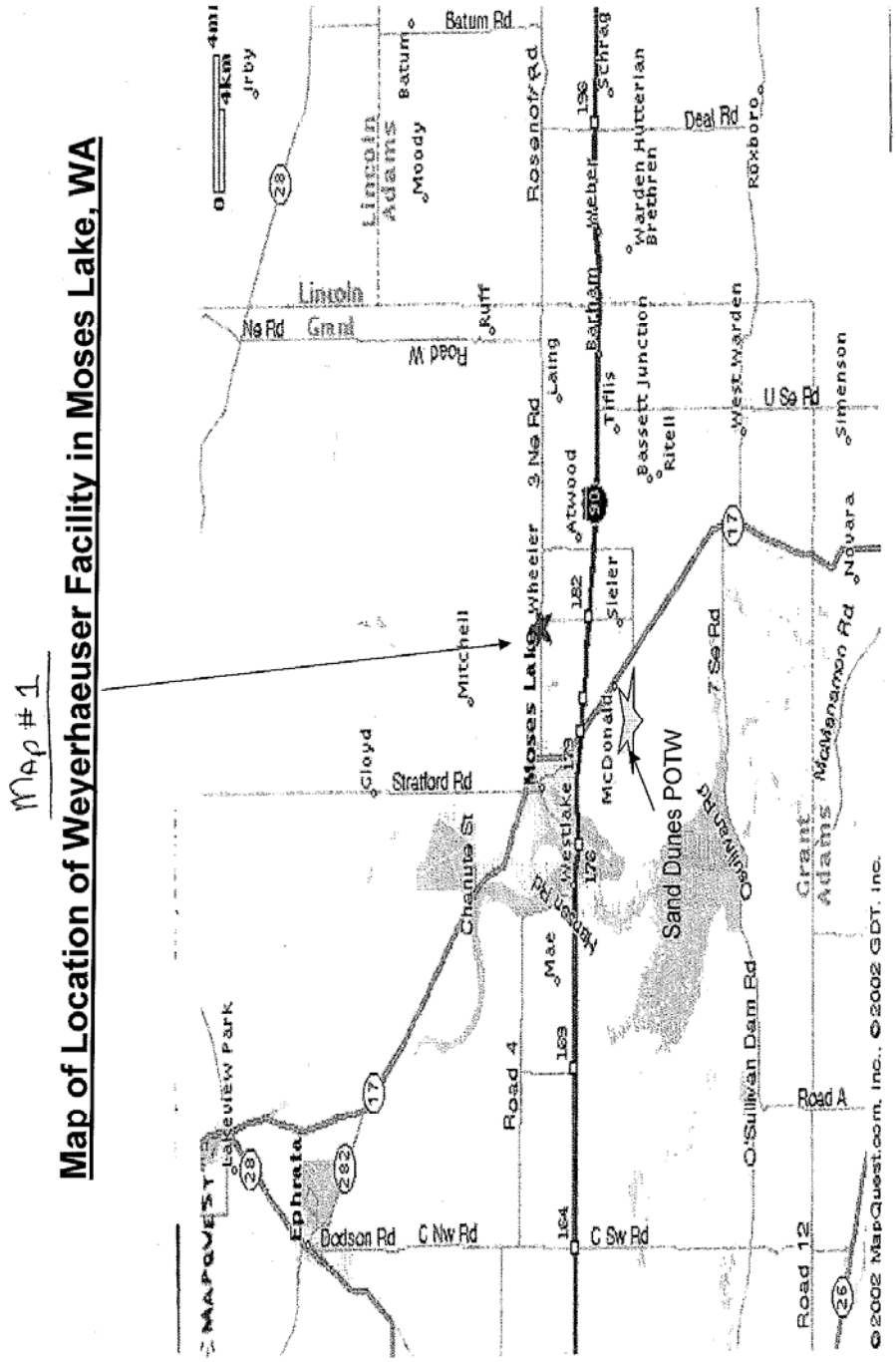
Total Suspended Solids (TSS)--Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

Water Quality-based Effluent Limit—A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water.

APPENDIX C—TECHNICAL CALCULATIONS AND DIAGRAMS AND CHARTS

Map #1

Map of Location of Weyerhaeuser Facility in Moses Lake, WA



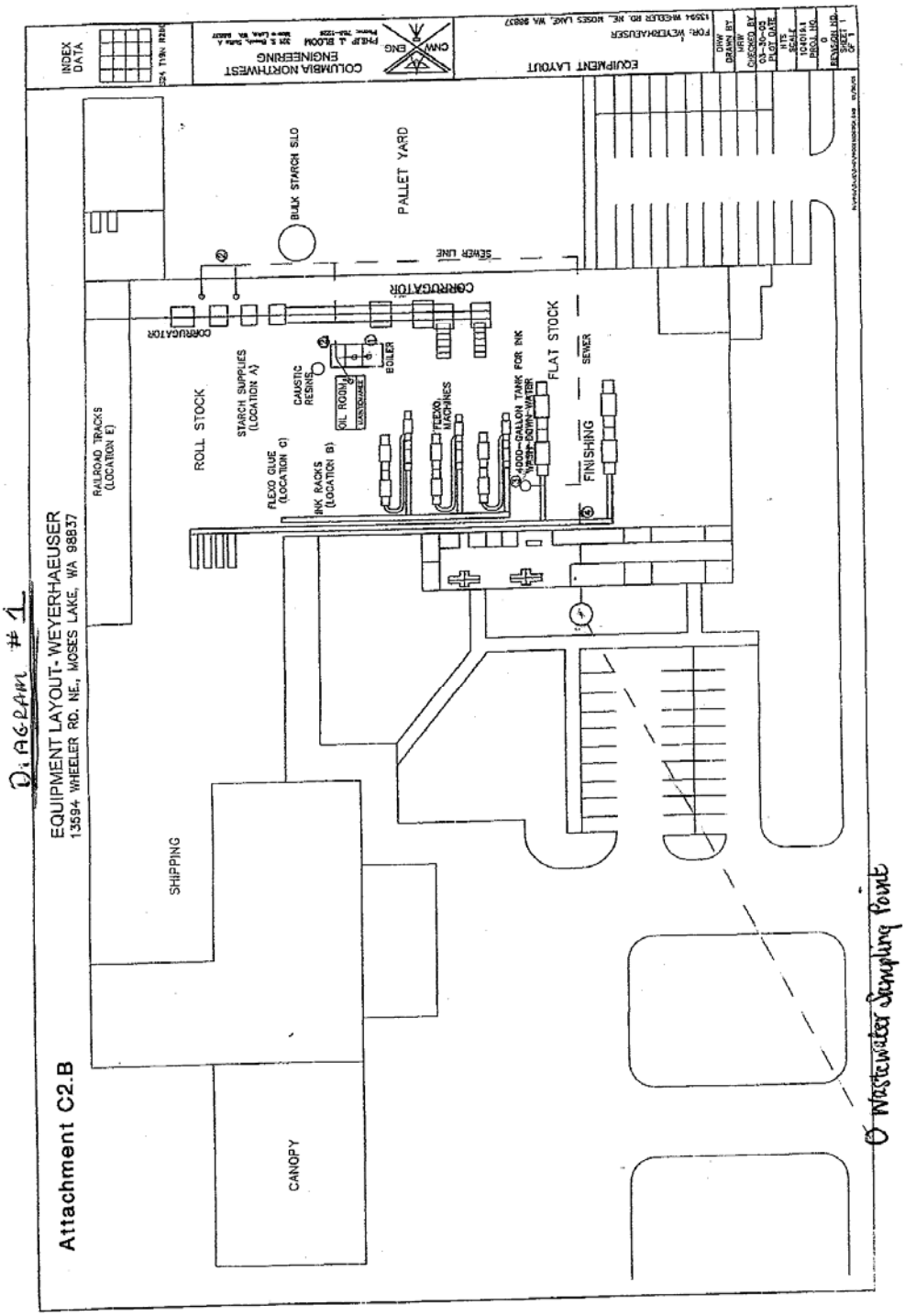


Diagram #1
EQUIPMENT LAYOUT - WEYERHAEUSER
13594 WHEELER RD. NE., MOSES LAKE, WA 98837
Attachment C2.B
EQUIPMENT LAYOUT
COLUMBIA NORTHWEST ENGINEERING
INDEX DATA
BULK STARCH SILO
PALLET YARD
SEWER LINE
CORRUGATOR
ROLL STOCK
STARCH SUPPLIES (LOCATION A)
CAUSTIC RESINS
BOILER
OIL ROOM
COMPRESSORS
FLEXO GLUE (LOCATION C)
INK RACKS (LOCATION B)
FLEXO MACHINES
4000-GALLON TANK FOR INK WASH-DOWN-WATER
FLAT STOCK
SEWER
FINISHING
RAILROAD TRACKS (LOCATION E)
SHIPPING
CANOPY
Wastewater Sampling Point

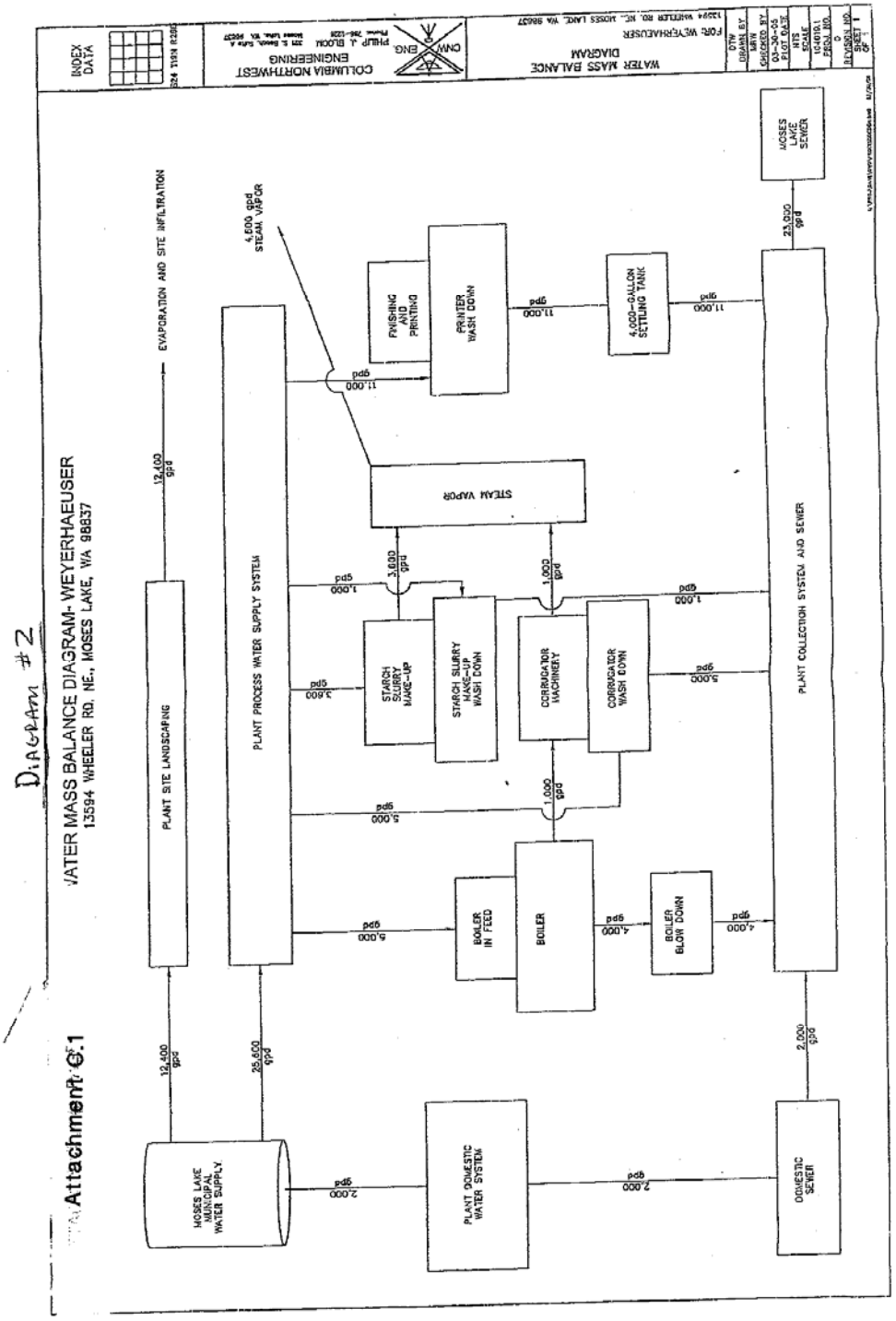


Diagram #2
WATER MASS BALANCE DIAGRAM- WEYERHAEUSER
13594 WHEELER RD. NE., MOSES LAKE, WA 98837
Attachment #1
EVAPORATION AND SITE INFILTRATION
12,400 gpd
4,600 gpd STEAM VAPOR
PLANT SITE LANDSCAPING
PLANT PROCESS WATER SUPPLY SYSTEM
FINISHING AND PRINTING
PRINTER WASH DOWN
11,000 gpd
4,000-GALLON SETTLING TANK
11,000 gpd
MOSES LAKE SEWER
23,000 gpd
STEAM VAPOR
3,600 gpd
1,000 gpd
1,000 gpd
STARCH SLURRY MAKE-UP
STARCH SLURRY MAKE-UP WASH DOWN
CORRUGATOR MACHINERY
CORRUGATOR WASH DOWN
5,000 gpd
1,000 gpd
PLANT COLLECTION SYSTEM AND SEWER
BOILER IN FEED
BOILER
4,000 gpd
BOILER BLOW DOWN
4,000 gpd
12,400 gpd
25,600 gpd
2,000 gpd
MOSES LAKE MUNICIPAL WATER SUPPLY
2,000 gpd
PLANT DOMESTIC WATER SYSTEM
2,000 gpd
DOMESTIC SEWER

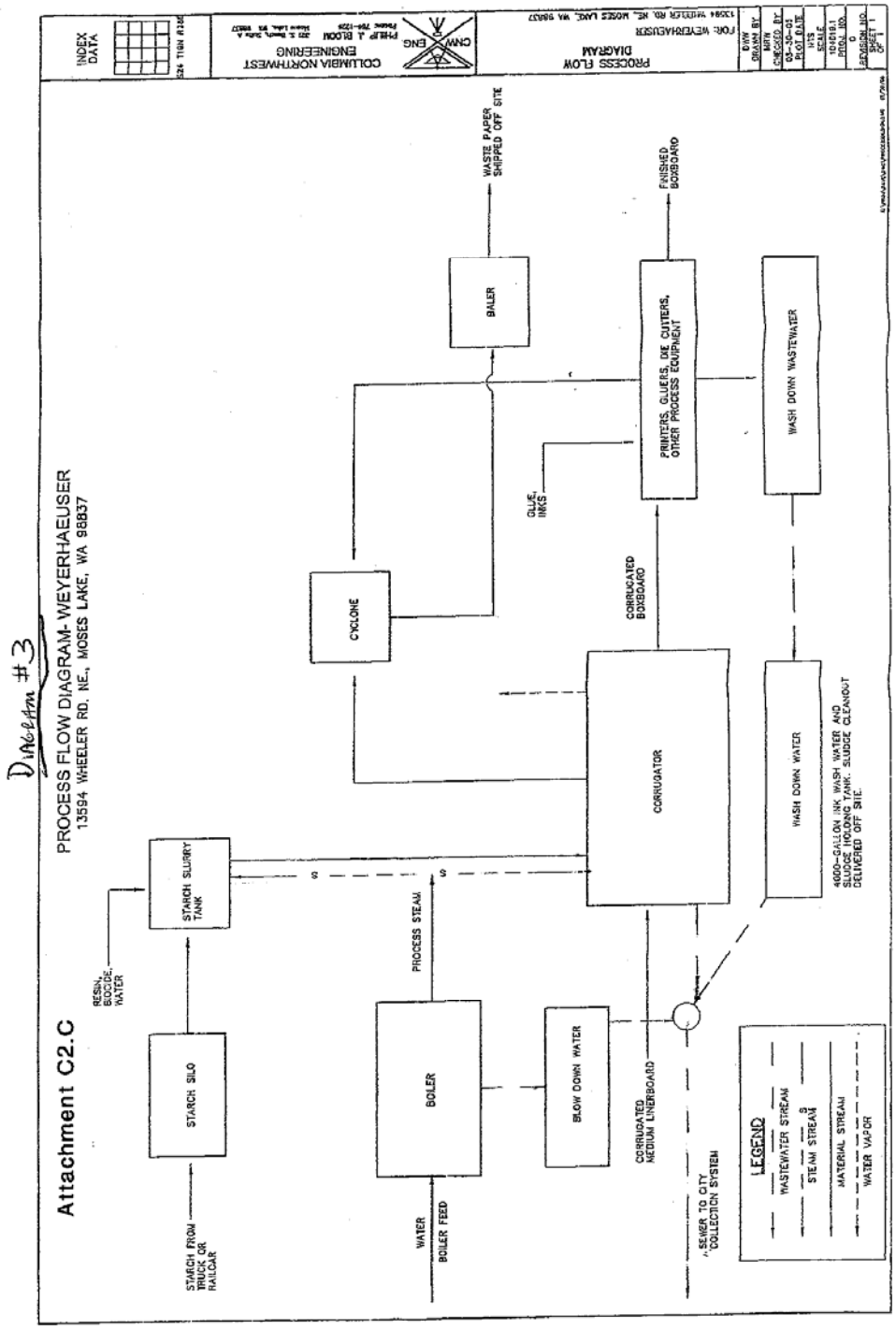
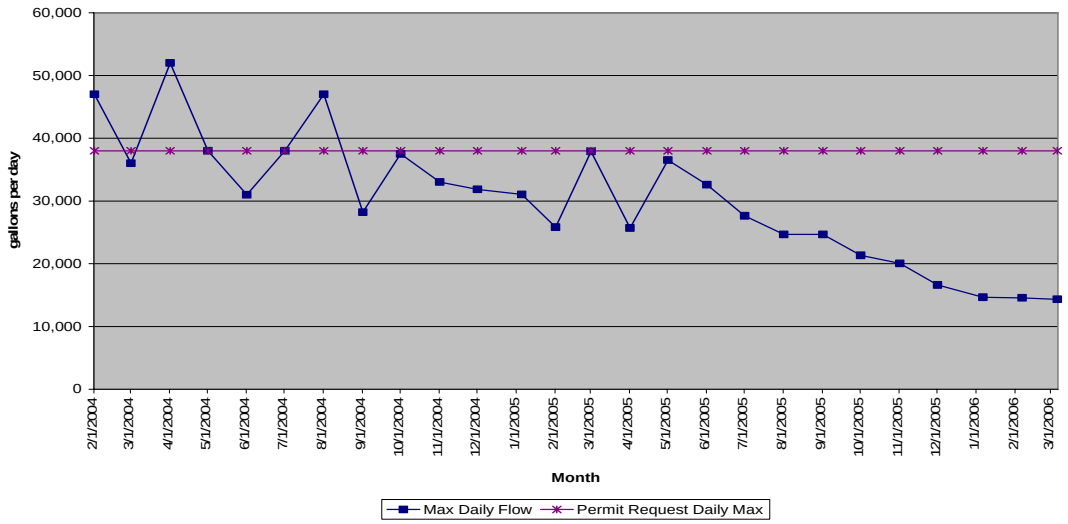
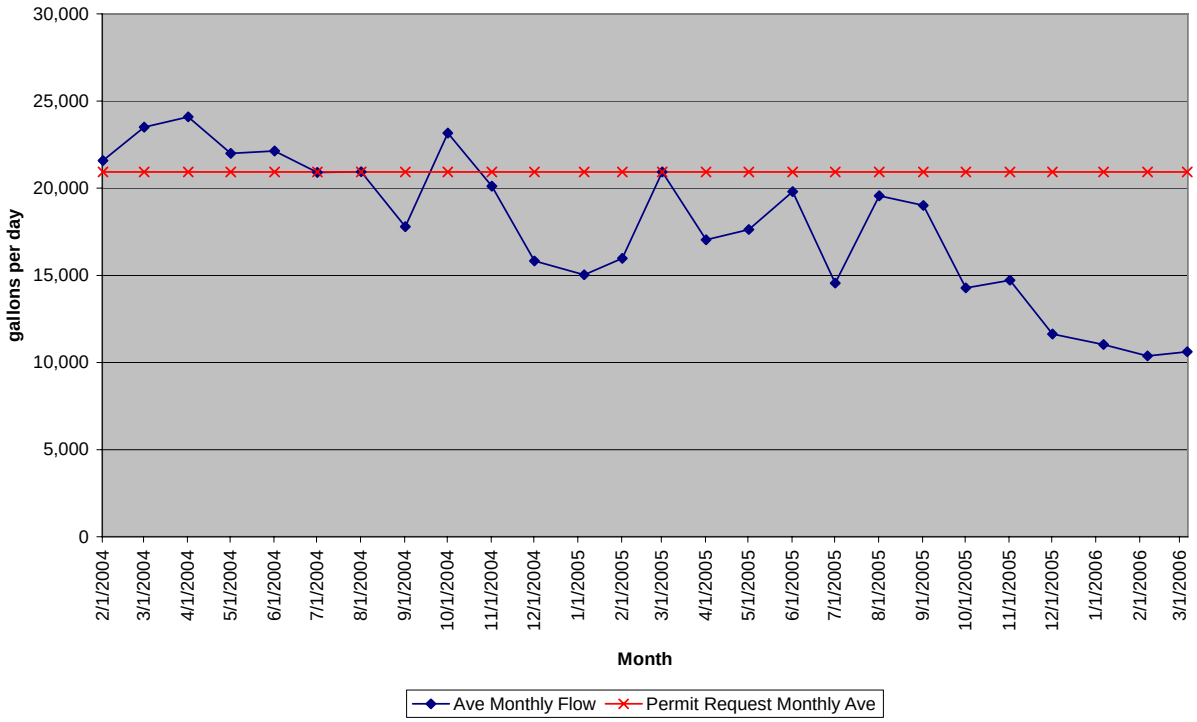


Diagram #3
PROCESS FLOW DIAGRAM- WEYERHAEUSER
13594 WHEELER RD. NE., MOSES LAKE, WA 98837
Attachment C2.C
WASTE PAPER SHIPPED OFF SITE
BALER
FINISHED BOXBOARD
PRINTERS, GLUERS, DIE CUTTERS, OTHER PROCESS EQUIPMENT
WASH DOWN WASTEWATER
GLUE, INKS
CYCLONE
CORRUGATED BOXBOARD
CORRUGATOR
WASH DOWN WATER
4000-GALLON INK WASH WATER AND SLUDGE HOLDING TANK. SLUDGE CLEANOUT DELIVERED OFF SITE.
STARCH SLURRY TANK
RESIN, BIOCIDE, WATER
PROCESS STEAM
STARCH SILO
BOILER
BLOW DOWN WATER
CORRUGATED MEDIUM LINERBOARD
STARCH FROM TRUCK OR RAILCAR
WATER
BOILER FEED
SEWER TO CITY COLLECTION SYSTEM
LEGEND
WASTEWATER STREAM
STEAM STREAM
MATERIAL STREAM
WATER VAPOR

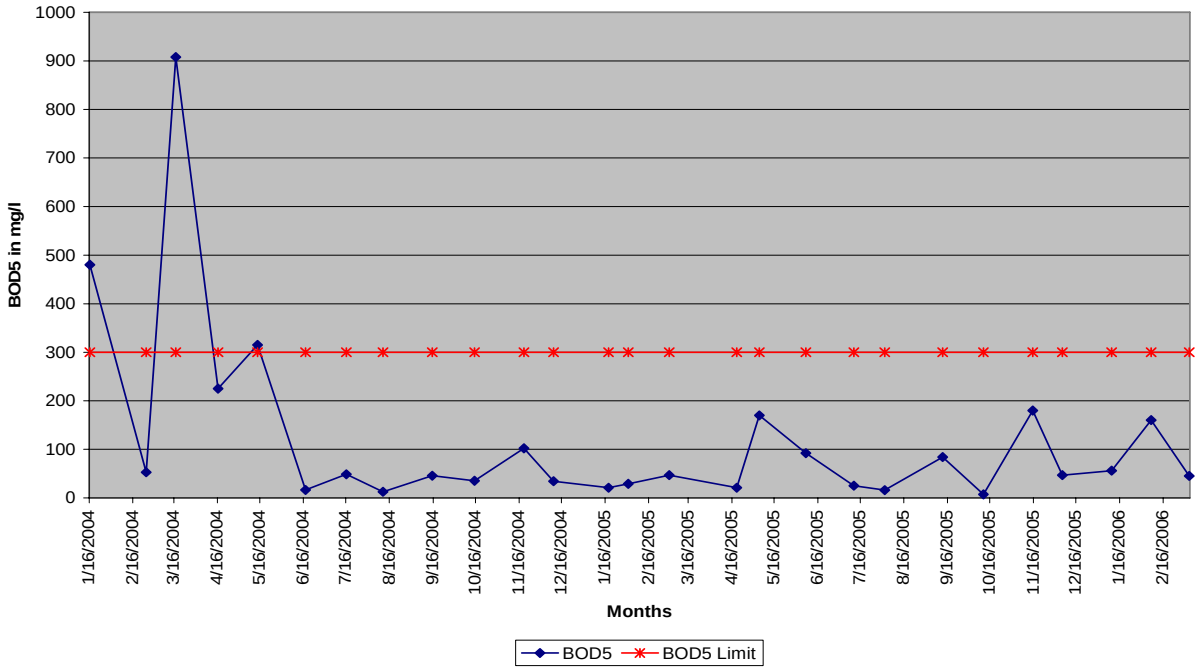
Weyerhaueser Maximum Daily Discharge Flow
Chart #1



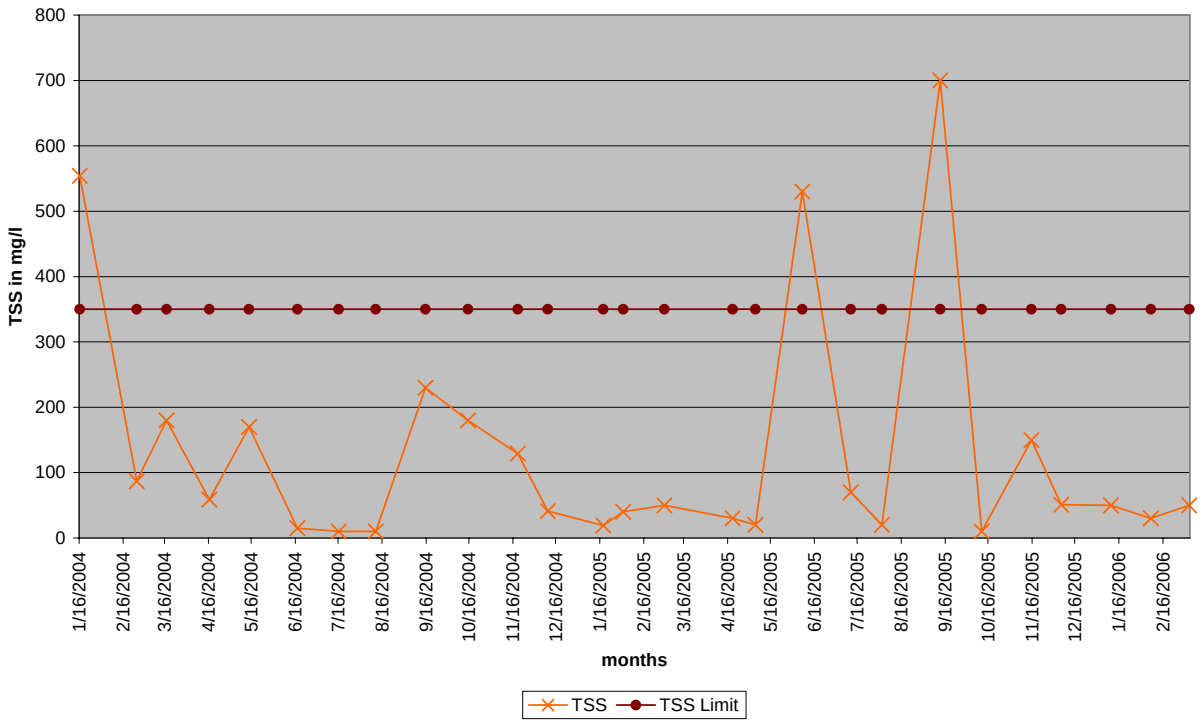
Weyerhaueser Monthly Average Discharge Flow
Chart #2



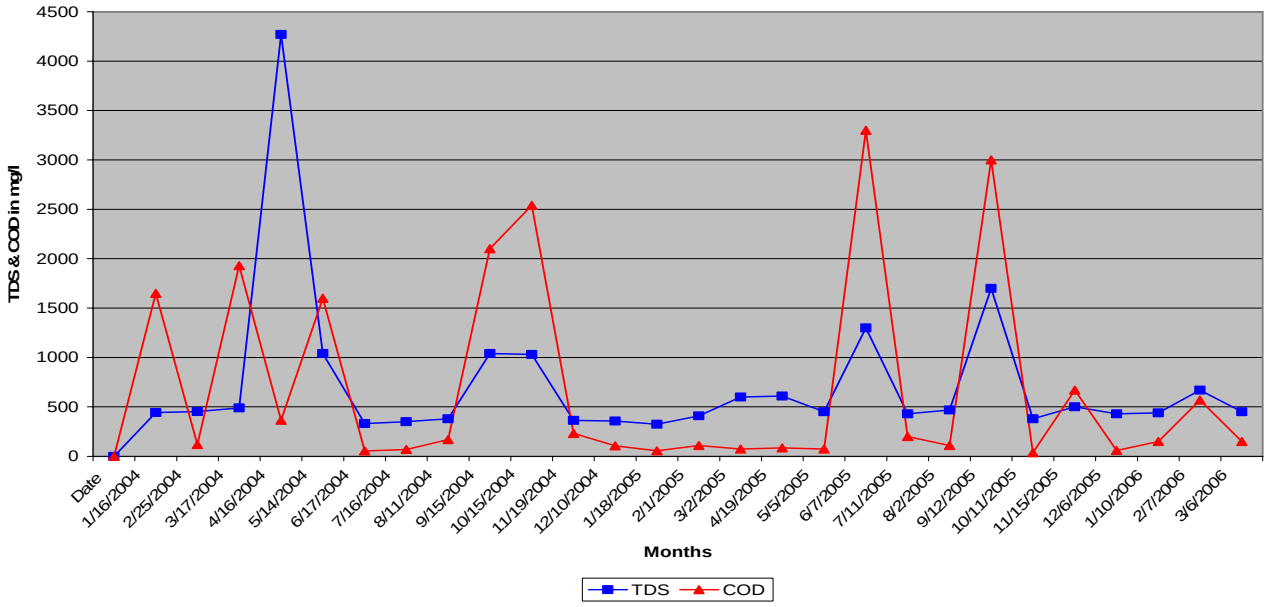
Weyerhaeuser's Wastewater for BOD5
Chart #3



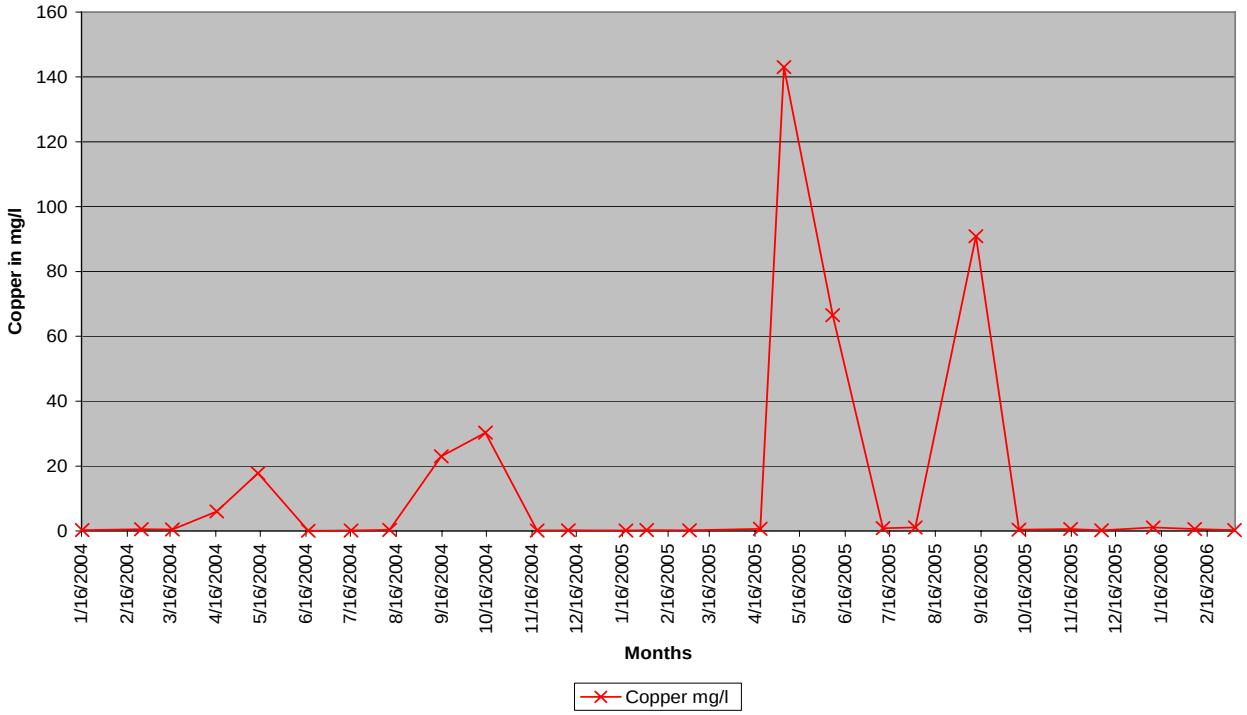
Weyerhaeuser's Wasterwater for Totat Supsended Solids (TSS)
Chart #4

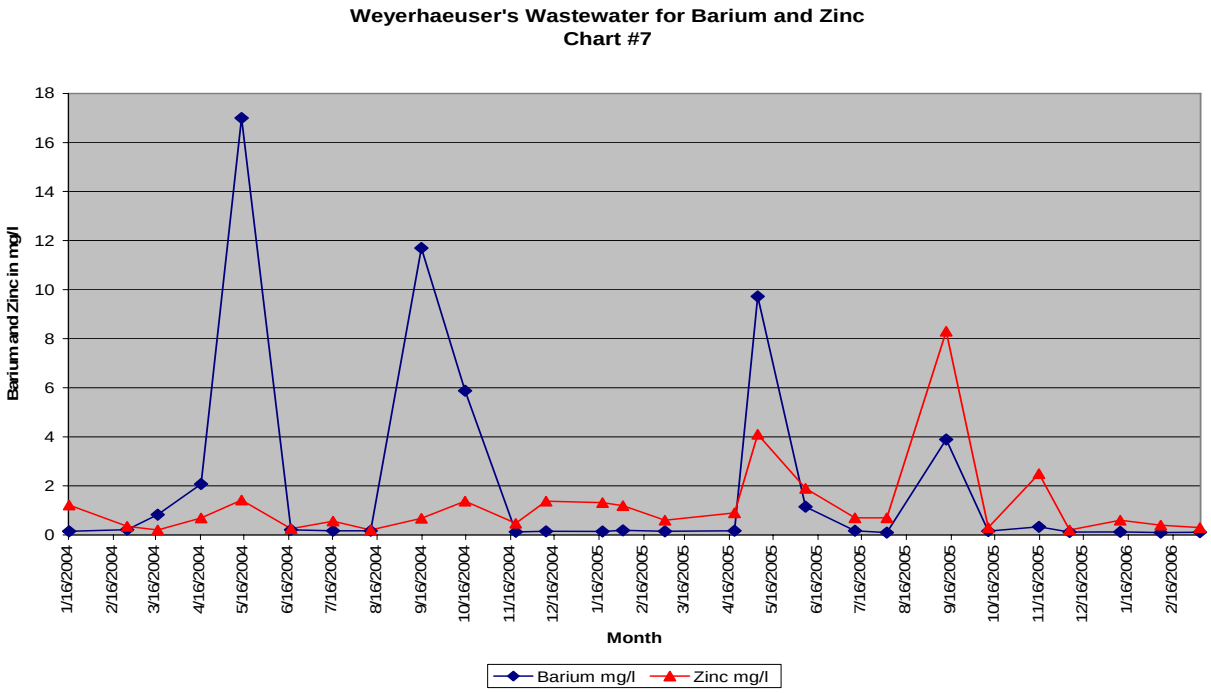


Weyerhaeuser's Wastewater for TDS & COD
Chart #5



Weyerhaeuser's Wasterwater for Copper
Chart #6




Weyerhaeuser's Wastewater for Barium and Zinc
Chart #7
Barium and Zinc in mg/l
18
16
14
12
10
8
6
4
2
0
1/16/2004
2/16/2004
3/16/2004
4/16/2004
5/16/2004
6/16/2004
7/16/2004
8/16/2004
9/16/2004
10/16/2004
11/16/2004
12/16/2004
1/16/2005
2/16/2005
3/16/2005
4/16/2005
5/16/2005
6/16/2005
7/16/2005
8/16/2005
9/16/2005
10/16/2005
11/16/2005
12/16/2005
1/16/2006
2/16/2006
Month
Barium mg/l
Zinc mg/l

APPENDIX D – RESPONSE TO COMMENTS

Permit

Comment -

Permit Section S1, Discharge Limitations - We agree with the requirement to monitor and report daily flow and to calculate a monthly average. Unless the Sand Dunes Wastewater Facility is hydraulically limited however, we would suggest there is not a need for an effluent limitation on flow quantity. We do not believe the Sand Dunes system is hydraulically limited. Water use in our facility has the potential to be predicatably variable, both due to seasonal production factors and because of routine washups. Limiting water use is a focus area for the facility and, as depicted in the graph of wastewater quantities presented in the Fact Sheet, water use has actually been reduced over the last year. Nonetheless, we would like to avoid the possibility of having to report any effluent violations and especially a violation based on flow. ‘

Response –

The permitted flow limit is based on the data in the application submitted to the Department of Ecology on January 3, 2006. If the company wishes to modify the originally submitted flow data, they can do so by submitting another application for review. Higher flow limits may cause an increase in permit fees.

Comment -

Permit Section S2.A. Wastewater Monitoring - We do not understand the reason for requiring monthly sampling and analysis for sulfides, sulfate and sulfites for at least a 12 month period. We are not aware of sewerage system degradation due to reduced sulfur compounds or that the Sand Dunes Treatment System is experiencing difficulties in treating this family of compounds. Are there problems such that the investigation of industrial/commercial wastewaters is warranted? We note that no pretreatment limitation has been established for these sulfur compounds in the City of Moses Lake's Sewer Use ordinance. The sampling for these sulfur compounds would add to the monthly workload/cost and present at least one special challenge. The Standard Methods analysis for sulfite must occur immediately after sample collection and utilize an iodine titration procedure. The facility is not equipped to perform this analysis nor would it seek to develop that expertise and ultimately gain certified lab status under Chapter 173-50 WAC. The implication, therefore, is that a certified environmental consultant/chemist must accomplish this monthly monitoring requirement. This will be expensive. The interest by Ecology and the City of Moses Lake to characterize the sulfur compounds in this facility's wastewater may certainly be legitimate. Could you consider a special study where there are one or two monitoring events for these compounds and then that characterization dictate whether on-going monitoring is really required?

Response –

The permit will be modified to allow twice per permit cycle of these three parameters. Sampling months will be September and October of 2006.

Comment -

Permit Section S2.A. - Wastewater Monitoring - We would suggest the requirement to monitor for Temperature is not really necessary. The City of Moses Lake Sewer Use ordinance establishes a 104 degree pretreatment limit. It is inconceivable that wastewaters discharged from this facility would exceed that limit. Similarly, it could be questioned whether actual quantification of Color provides any useful information to Ecology or the City of Moses Lake. The facility wastewater is consistently highly-colored. The facility and the City of Moses Lake treatment system operators are in routine communication on the pumping schedule for the 4,000 gallon settling tank and any unusual events that might occur. If there is not a compelling reason for the requirement to routinely produce Color data, we would suggest the current interaction with the City is sufficient. This approach could perhaps be supplemented with one or two monitoring events to generally characterize wastewater Color.

Response –

The Company will still be required to monitor for temperature due to the fact that there is still a steam discharge from the corrugator and boiler blowdown discharge. Temperature monitoring is also required due to the health and safety of the plant workers.

The Company discharges wastewater that is high in color and should conduct laboratory sampling instead of visual results. Sampling will be six times a year instead of each month.

Fact Sheet

Comment -

There are several statements that wastewaters from this facility have "the potential to cause interference and/or pass through at the Dunes Treatment Facility." A more specific statement is that "there are still issues with copper, barium, zinc, TDS, color, and a possible co-polymer in this tank's wastewater." These statements take us by surprise. We would appreciate learning about any operational difficulties or in-process or final effluent monitoring data at the Sand Dunes facility which might be related to the wastewater contribution from our facility. An opportunity to review the information supporting these statement, or generally to understand Ecology's or the City's perspective on the pretreatment program and issues, would be helpful.

Response –

Due to the recent upgrade of the treatment facility the wastewater from the facility has a possible potential to cause interference and pass-through. This potential is due to the additional frequency of biosolids removal and upsetting the new ultraviolet disinfection system. Therefore, the word “possible” has been added to the specific statement regarding issues with various parameters.